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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/600,941	09/13/2000	Harald Hoffeld	V010219	4154

7590 10/10/2002

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EXAMINER

LOPEZ, FRANK D

ART UNIT

PAPER NUMBER

3745

DATE MAILED: 10/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/600,941

Applicant(s)

HOFFELD ET AL.

Examiner

F. Daniel Lopez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 August 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 6 August 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

***Response to Amendment***

Applicant's arguments filed August 6, 2002, have been fully considered but they are not deemed to be persuasive.

Applicant argues that Mueller does not disclose a pump wheel blade with a connection channel between the toroidal space and the intermediate space, and having a directional component essentially tangential to the contour of the circulation of the operating medium, such that rinsing is achieved in the intermediate space; and that rinsing is not advantageous in Mueller, since a build up of impurities is advantageous. Applicant is mistaken. Mueller shows the connection channels, one above the "2" and the other above the "3". A build up of impurities is not advantageous, since the pump wheel blade must rotate relative to the housing, at least in certain circumstances. Note that the rinsing effect is understood to mean that there is a flow through the intermediate space, which is disclosed by Mueller and the below discussed Bilton.

Applicant argues that Bilton does not disclose a pump wheel blade with a connection channel between the toroidal space and the intermediate space; since discharge outlets 11 exhaust fluid outside the casing. Applicant is mistaken. Bilton shows connection channel (above the number 7), in a portion of the pump wheel blade (1) adjacent an upper end of a filling tube (5), connecting the interior of the pump wheel blade with an intermediate space between the pump wheel blade and the housing (4).

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the connection channels arranged on two or more circumferential lines, parallel to a central plane (claim 24) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance. A full set of corrected drawings needs to be submitted, since formal drawings are lacking in this case.

***Claim Rejections - 35 USC § 112***

Claims 20 and 24 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20 appears to not further limit claim 1, since the limitations of claim 5 appear to be the same as that of claim 1 line 12-16. In claim 20 line 3 "operating medium flow circulation" does not make sense; suggest that "flow circulation" be deleted.

In claim 24 "more than one circumferential lines" is wrong; suggest that "more than one" should be --two or more--.

Claims not specifically mentioned are indefinite, since they depend from one of the above claims.

***Claim Rejections - 35 USC § 102***

Claims 16-22, 27 and 28 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Bilton.

Claims 16-26, 29 and 30 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Mueller. Concerning claims 29 and 30, the channels (unnumbered) through the pump wheel (2 or 3) appears to be a drilling, which would make it circular in cross-section, perpendicular to its axis, and oval in cross-section, taken at a non-perpendicular angle from its axis.

Concerning claims 18 and 19, the housing of each of Bilton and Mueller is directly connected to one of the pump and turbine wheels, and indirectly connected to the other of the pump and turbine wheels through the one of the pump and turbine

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wheels. Since "at least indirectly connected" is understood to include directly connected, Bilton and Mueller each meet the imitations of claims 18 and 19.

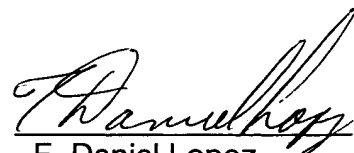
**Conclusion**

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is (703) 308-0008. The examiner can normally be reached on Monday-Thursday from 6:30 AM -4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on (703) 308-1044. The fax number for this group is (703) 872-9302. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0861.



F. Daniel Lopez  
Primary Examiner  
Art Unit 3745  
October 07, 2002